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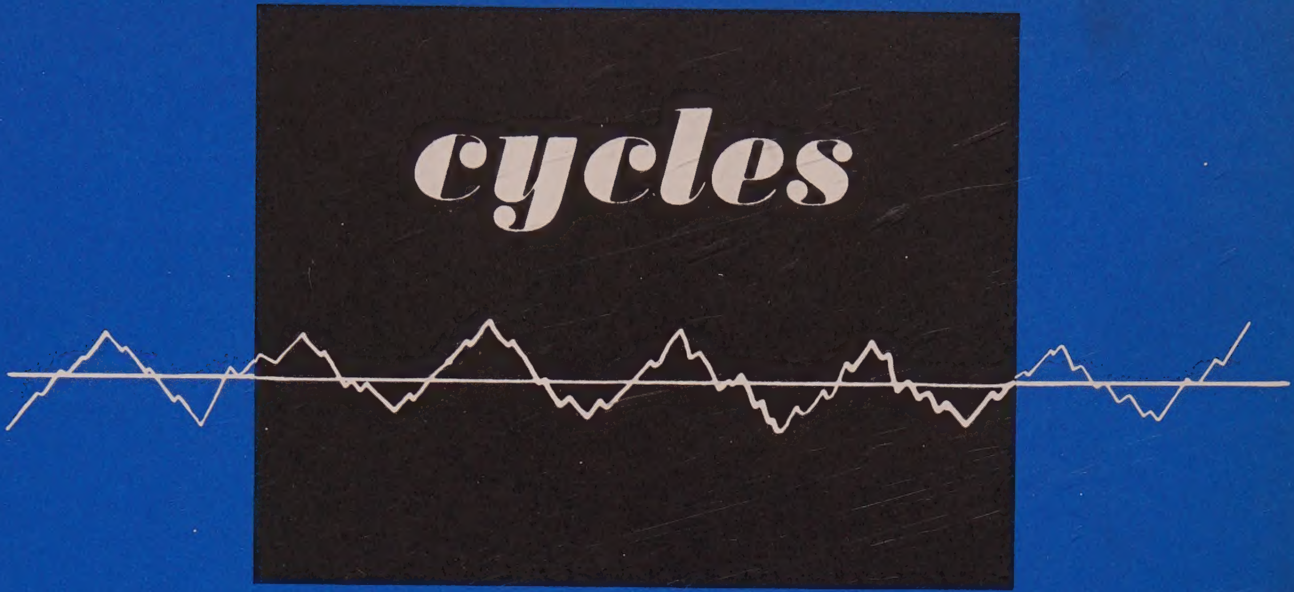

September 1960

FOUNDATION FOR THE STUDY OF CYCLES
New York, New York

cycles

SEPTEMBER 1960

VOLUME XI, NUMBER 9

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Cycles are only *one* of the forces you must consider if you are attempting economic forecasting.

If you ignore the cycles you run the risk of serious errors.

But unless you study and weigh all the *other* forces that, in addition to cycles, combine to create economic change, you will make grave mistakes.

Cycles is published by the Foundation for the Study of Cycles at the Foundation's office at East Brady, Pennsylvania. Subscription rate $12.50 a year. Entered as second class matter at the post office at East Brady, Pennsylvania, with additional entry at Dexter, Michigan. Publication office, 680 West End Avenue, New York 25, New York

DIRECTOR'S LETTER. . . .

Dear Member:

On June 11 last, my wife and I gave a party for all the Western Pennsylvania Foundation members and their wives. I wish you could have been there!

The Foundation has 90 members in this area. With their wives this would have made 180 guests, if all had come. But, of course, they didn't. Actually, including ourselves, we were only 51.

Fortunately the weather was beautiful. We were able to center the party in the yard, under the apple trees and surrounded by my wife's flower beds. But we were prepared to come inside in the event of rain.

Between roasting wieners in the outdoor fireplace, eating, drinking, and talking, I drove small groups for a look-see around the property; my wife took other groups through the house. People seemed to enjoy both sorts of trip—as well as the opportunity to meet each other.

We live on a really fabulous place. It is situated on the west bank of the Allegheny River, about 60 miles north-north-east of Pittsburgh. It is called Bradys Bend, named for a famous Indian fighter who defeated a band of Senecas at a bend in the river at this point. It used to be over 6,000 acres (10 square miles) in extent, but it has dwindled so that, even including mineral rights it now covers only about 4,000 acres. It consists largely of wooded hills about 400 feet high. The hills have fairly flat tops. The valleys are rather narrow. One way or another, the property has about seven miles of river frontage. In fact it has a little bit of everything.

Originally, in 1839, it was put together by an iron company. The fact that iron ore, limestone, and coal for the making of coke were all present in huge quantities was the decisive factor in determining the location. River transportation to Pittsburgh was vital, too. The presence of good water, clay for fire brick, building stone and timber for houses, and good farm land, added to its desirability. Natural gas and oil were discovered later. All we lack are the precious metals and uranium!

The promoters of the Bradys Bend Iron Company were bold men. They defied the tradition that American iron could not be made with coke, like British iron, but must be made with charcoal. They felt that the trouble in America was not our coke, but our labor. They backed their hunch with money, put together the property, built their furnaces and imported British and Welsh labor. Their idea was right! Iron *could* be made with American coke. More furnaces were built. Then a rolling mill, and a village large enough to house 5,000 people. The first rails made west of the Allegheny Mountains were rolled here. Bradys Bend became the cradle of the American iron and steel industry.

Then came the panic of 1873 (cycles!). The company failed. It never resumed operation. The property went steadily downhill until 1901 when Father bought it from a New York bank.

When Father acquired it, the property consisted of the acreage, the remains of the blast furnaces and rolling mills, about 125 houses, a couple of stores, schools, and several churches that had been abandoned and had reverted—pews, bibles, organs, and all—to the former owners. It seems to intrigue people that anyone should own a whole village, and Father's friends used to twit him about being the "Baron!"

Among the houses were two really good ones. The old Iron Company Manager's mansion of 22 rooms; the Assistant Manager's house of ten rooms (and two baths). Mother didn't feel able to cope with 22 rooms. She chose the smaller house instead. This is where my wife and I live now. (Some years ago the big mansion burned down.) Of the others, Father rebuilt about 100. The rest were too far gone to save.

Father's aim was to bring the property back to its one-time glory. This goal was impossible of fulfillment, but he made a good try. He failed to get the iron furnaces rebuilt. He failed to get a cement plant started. He failed in his effort to establish a resort hotel. But he did get a railroad built into the property, a brick works going, and coal and limestone mines opened. The railroad is still operating. The brick plant ran for many years. The Statler Hotel in New York City was built with brick made here. The coal has been shipped as far away as Detroit and Canada. For many years, the limestone helped run the furnaces and cement plants of the U. S. Steel Corporation in and around Pittsburgh.

Father also operated the old Iron Company farm of 160 acres (I used to plow it when I was a boy), and got another of the old farms into operation. Now, instead of farming, I grow Christmas trees. There are about 100,000 coming in.

Finally Father drilled some gas wells, formed a gas company, and entered the business of selling natural gas. This operation still continues.

I have said that the promoters of the old Iron Company were bold. Father was bold, too. I doubt if he had more than a few thousand dollars to his name when he took the plunge. But he borrowed a few thousand from friends, Mother pawned her rings, and someway or other they scraped up the down payment. Then Father sold the timber for some $40,000 and paid off the mortgage! However, it was twenty years or more before he was out of debt. As soon as he had one thing paid for he would borrow for something else. Father was a builder.

I tried to tell our guests some of these things as I drove them to the top of one of our hills to see one of the finest views in Western Pennsylvania. They also saw some of the Christmas trees.

At the party my wife escorted on trips through the house such of our guests as were interested in old houses and in antiques. A number of antiques came with the property, we have quite a number of pieces inherited from both sides of the family, and many more that have been picked up over the years.

Since 1951 all of the first floor has been used as an office by the Foundation. We live upstairs. But the house is interesting in its own right. The high ceilings, fireplaces, hand-wrought woodwork, walnut balustrades and design proved to be as much of an attraction as the trees, views, gas wells, and river.

Again I say, I wish you could have been there to join us! I think you would have enjoyed it.

Cordially yours,

Edward R. Dewey

Director

P.S. Our only regret is that because of geography many many more Foundation members could not have come!
E. R. D.

A POSSIBLE CYCLE IN HOURS WORKED: ITS TIMING AND EFFECT

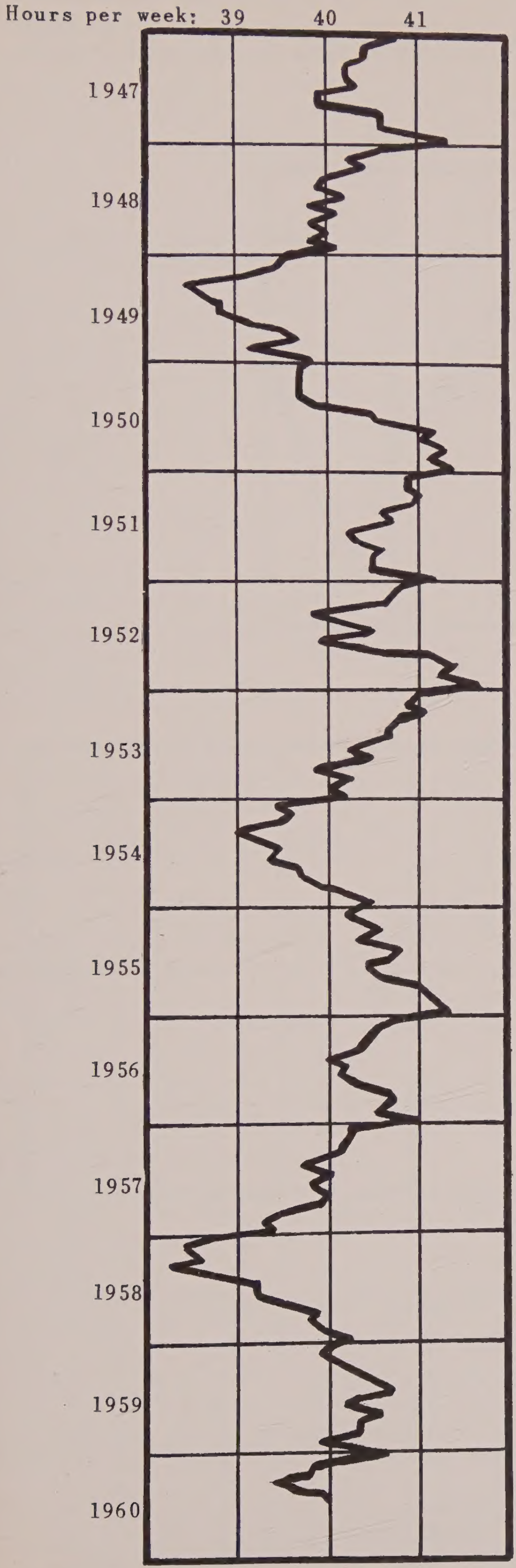


FIG. 1: THE RECORD OF HOURS WORKED

by E. R. Dewey

The 26-month cycle in hours worked provides a bright spot on the picture for 1961. This cycle has a typical low at September 1960 after which it goes up for 13 months.

"Average hours worked per week in manufacturing industries" is a leading Indicator. That is, as explained in *Cycles* for July 1960, these figures tend to go up and down *ahead* of business in general. You should watch them closely to see what they are doing.

In normal times these figures have an extreme variation from about 38 1/2 to about 41 1/2 hours per week.

Figure 1, at the left, is a picture of average hours worked in all manufacturing. It gives the record reading from January 1946 at the top down through June 1960. (The figures are compiled by the Bureau of Labor Statistics of the U. S. Department of Labor.)

From 1950, the overall trend has been downward from an average of about 40 1/2 hours a week to an average of about 39 1/2 hours a week.

In Figure 2 (on the next page) this trend has been removed.

THE CYCLE

Since 1946 these figures have gone up and down in a cycle that averages about 26 months in length. They have done this six times. See Figure 2.

Before 1946 the situation was so mixed up by the depression and the war that the cycle is not clear.

On the average this cycle accounts for a difference of about an hour a week between times of high and times of low. For the whole labor force engaged in manufacturing this amounts to over 64,000,000 man-hours a month. Not to be laughed at!

Six repetitions are not very many. Maybe the regularity is merely accidental. But I'm inclined to think it has meaning, and that it will continue.

If it does, hours worked are due to go up shortly. If hours do go up, it will be a good sign.

The six lows we have had came (1) on time, (2) five months early, (3) four months late, (4) two months late, (5) one month late, and (6) two months early, respectively. Similar variations, maybe more, are to be expected in the future.

This cycle does not give you an absolute forecast of hours to be worked in manufacturing. However, it should help you to look around the corner. It represents a tendency. And, for what it may be worth, this tendency provides a bright spot on the picture for 1961.

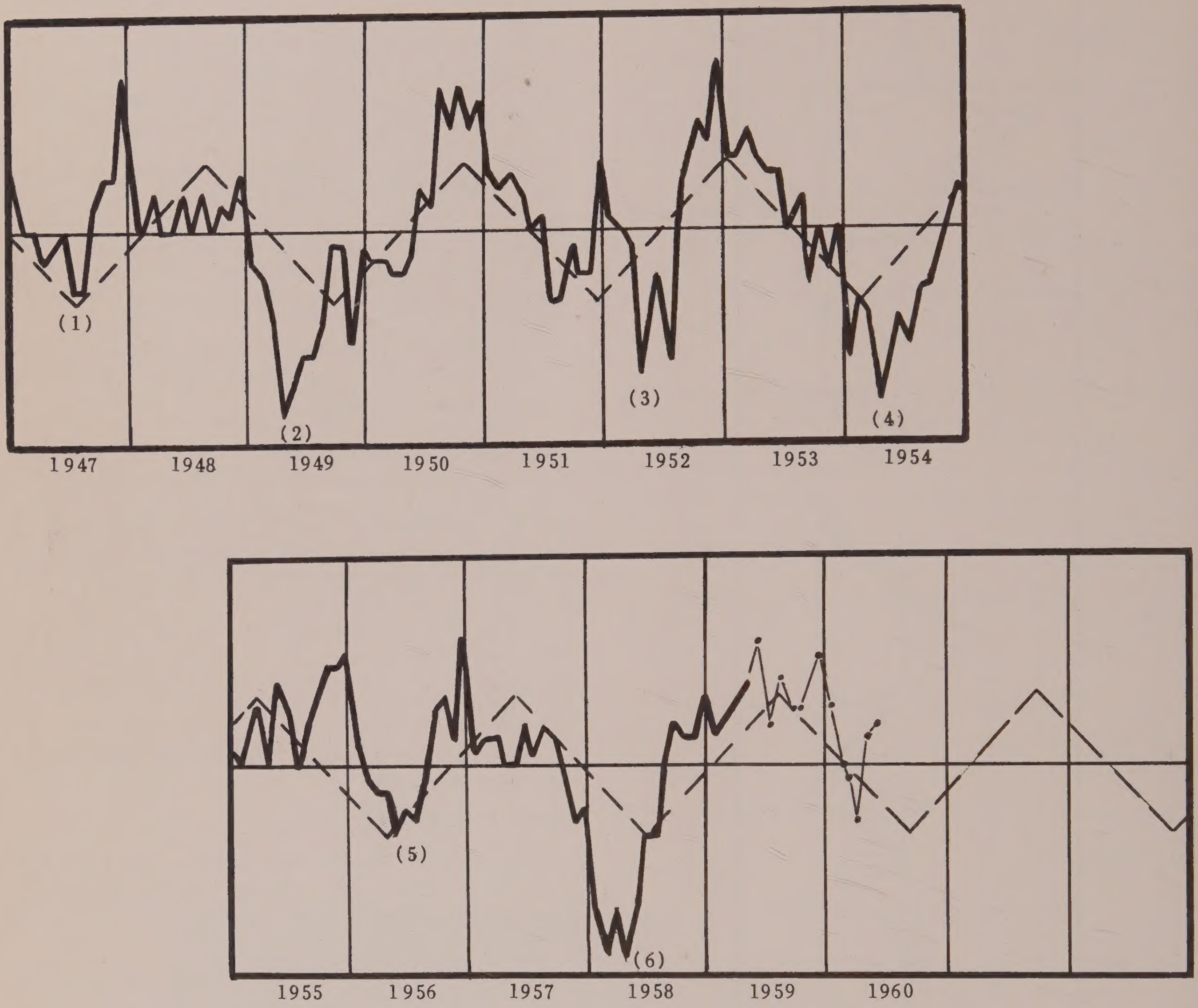


FIG. 2: THE 26-MONTH CYCLE IN AVERAGE HOURS WORKED PER WEEK IN ALL MANUFACTURING INDUSTRIES

LATITUDINAL PASSAGE IN THE RABBIT CYCLE

by Leonard W. Wing

(This article is excerpted from "Scattered Reports and Latitudinal Passage in Rabbit and Rodent Cycles" by Leonard W. Wing, which appeared in the April 1960 issue of the *Journal of Cycle Research.*)

That the number of the snowshoe rabbit in northern North America rises to peaks of abundance and declines again in a cycle of about 9.60 years has been established.

On all cycles tested so far, highs and lows occur progressively later as the cycle appears equatorward. (*This characteristic behavior is known as latitudinal passage.*) If the snowshoe rabbit cycle also has latitudinal passage, equatorward timings of highs and lows should be progressively later and later. Hence, testing for latitudinal passage in rabbit fluctuations is clearly in order. But how to do so is a difficult matter.

Rabbit reports are scattered, isolated reports. We need, therefore, an objective technique that can use these isolated, single, and scattered reports. Phase charts serve the purpose. On the phase chart, one plots the timing of a single high with respect to calendar time which covers one wave length. Highs of a valid cycle should thus cluster in a group. The plotting is also done with respect to latitude which should show any passage.

If periods of abundance in other rabbits, whether jack rabbits or cottontails, are related to the 9.60-year cycle in the snowshoe rabbit, a latitudinal or continent-wide relationship should be present.

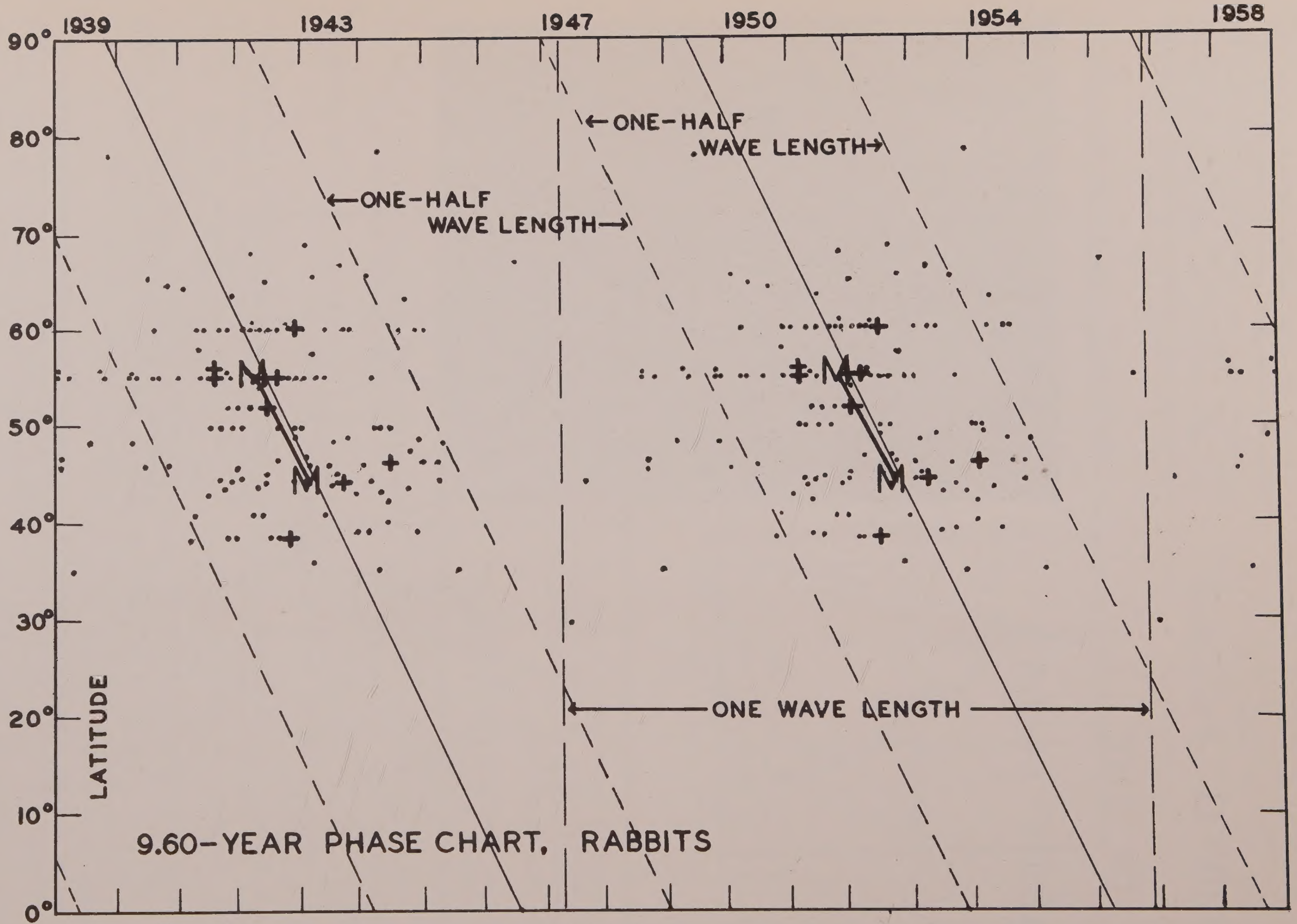
North American rabbit and hare reports of highs and lows totaling 159 have been rendered into current time with respect to the 9.60-year cycle. These current highs are plotted on the phase chart on the next page. Reference timing for comparative purposes is established as 1952.1 at 55° North Latitude.

The 159 rabbit reports found in the literature cover North America from 78° 20' North to 29° 30' North.

Photograph courtesy of the American Museum of Natural History, New York City

The timings are not randomly distributed on the chart, having a ratio of about 6 1/2 to 1 within half a wave of perfect timing. Timings from different periods (before 1920, before 1900, before 1860) consistently show a similar non-random distribution. A majority of rabbit reports of abundance have been associated with occurrence of the 9.60-year cycle.

Moreover, the more southerly reports show later timings than the more northerly ones. This indicates the presence of latitudinal passage. The rate of latitudinal passage shown by the rabbits (line M—M on the chart) approaches the ideal or theoretical rate.



The dots mark the timing of highs indicated by scattered reports of rabbit abundance. Average timings of highs based on time chart analysis are marked by the crosses. The respective medians (middle time of highs) north and south of 50° Latitude are shown by letters M. The line connecting the M's is the assumed latitudinal passage of rabbit highs based on 159 scattered reports.

Is the price of sugar going up?

by Gertrude Shirk

The answer to that question is: Yes, sugar prices may continue to rise from now until October. After October there may be a decline in prices. The answer is yes only if the behavior patterns of the past few years continue to dominate the picture.

A news commentator, in speaking of the Cuban mess, said that the price of sugar is "firming." He added that there would probably not be a big increase in sugar prices because of the present large world stocks of sugar.

This comment brought to mind the question of how much of any change in sugar prices could be due to cycles. Cycles in sugar prices, not in Cuban dictators.

An examination of the picture of sugar prices immediately reveals a seasonal pattern, or 12-month cycle. It is a fairly reliable cycle, although it changes somewhat from year to year. That is, not every year will fit the average pattern of all the years.

Nevertheless, it is quite usual for the price of sugar to be highest during the summer and autumn months. The beginning and end of the year are ordinarily the low points of the year.

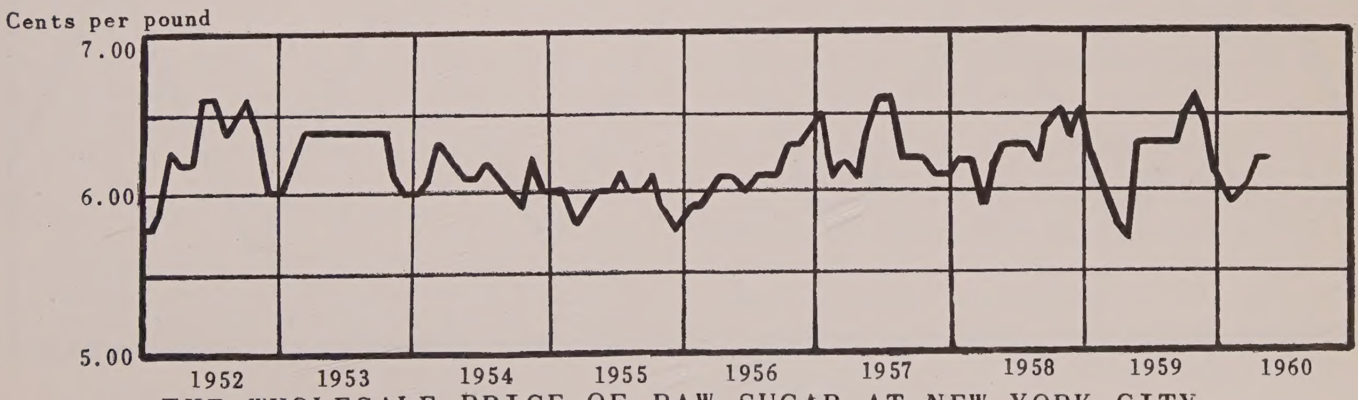
The change in price resulting from the seasonal pattern is less than a cent a pound. In fact, it usually amounts to less than half a cent a pound from the low point at the beginning of the year to the high point in July or October. The figures we are using are the wholesale price of raw sugar at New York City. Local retail prices are another story.

The rise in wholesale prices during 1959 was quite dramatic, and much greater than the average seasonal spread between low and high. Prices rose from a low of 5.7 cents in April to 6.6 cents in October. However, the timing of the move during 1959 did fit the pattern.

Taking into account all the years since World War II, the average seasonal pattern has been:

Month	% of Yearly Average	Month	% of Yearly Average
January	99.1	July	101.9
February	98.1	August	100.7
March	98.2	September	101.2
April	98.1	October	101.6
May	100.3	November	100.7
June	101.2	December	99.0

These are average figures—individual years may sometimes exceed them in range. Ordinarily the timing will be more in line with the pattern than the range. So far in 1960 the performance of prices has been normal. G. S.



THE WHOLESALE PRICE OF RAW SUGAR AT NEW YORK CITY

An Experiment with a 603-Year Cycle

In the year 465 B.C. the Aurora Borealis gave a long and magnificant display. It flashed for more than seventy days, which may be the all-time record. The Greeks certainly noticed it and recorded it.

These skyworks are sound evidence of great disturbance on the sun, and the date can be used as a pivotal date for timing long historical cycles.

W. F. Petersen in his book, *Man Weather Sun* performs an experiment using the year 465 B.C. as the base date. He selected 465 B.C. because of its obvious sunspot great maxima.

This year was also the beginning of the Age of Pericles which is often called the "most brilliant in human history" to quote Petersen. This most brilliant era started with earthquakes and aurora, and ended suddenly 35 years later with plague and wars. Petersen selects 465 B.C. as *the* critical date.

From this date he moves forward in a cycle by intervals of 603 years.

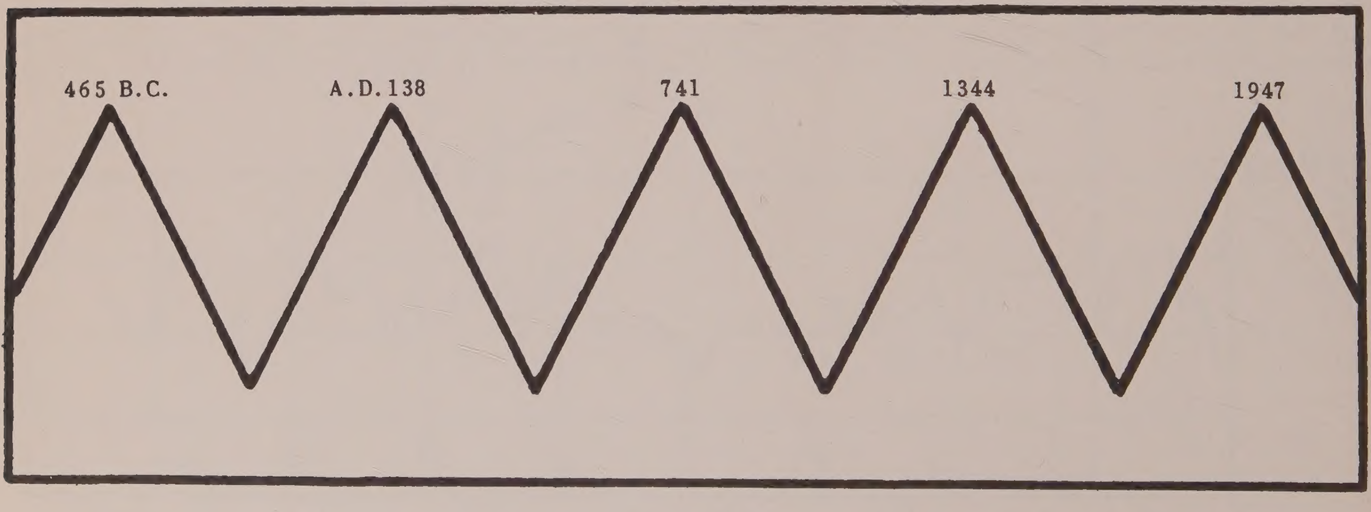
The length of 600 years keeps coming into the literature on cycles from entirely different directions. See "A Fundamental 600-Year Cycle" by E. R. Dewey in *Cycles*, May 1955. Pearson also worked out a cycle of about 600 years. In this experiment Petersen uses 603 years as the length of the historical cycle. Iw was worked out by Gillette using entirely different methods.

Adding 603 years to 564 B.C. brings us to A.D. 138. This year was about the beginning of the end of Roman civilization. The gilt was still heavy, but the cracks were showing through. The empire at the time was economically the most unified, but Rome was beginning to yield its position to the growing power of the provinces. 37 years later came the Plague of Antoninus, and in the third century the Roman government collapsed completely.

Again adding 603 years Petersen continued his experiment. This comes to the year A.D. 731, the year Charles the Hammer died, and nine years after he had beat the Moslems and saved Christianity and the West. Certainly some sort of a pinnacle.

Another 603-year cycle would end at 1344. At this time the Christian world was greatly stirred—revolt against Church and State—the Hundred Years War—the Black Plague. All the events of the time point up that the structure of feudalism was beginning to crumble.

Petersen ends his interesting experiment with the addition of another 603 years. Which comes out at the Year of Our Lord 1947. G. S.



A SUGGESTED HISTORICAL CYCLE

Time and time again. . .

by Gustav Gumpert

Cycles for Sale

For $2 you can buy a chart showing how you'll react—based on alleged cycles—during the next two months. Biorhythm Computers, Inc., 28 East 22nd Street, New York 10, New York, have been making that offer in advertisements appearing in a number of popular magazines.

We looked into the matter and found that the theory is based primarily on findings of Wilhelm Fliess, a friend of Sigmund Freud, who claims to have discovered a 23-day cycle in bodily reactions and a 28-day rhythm in emotional responses.

Then Dr. Hans Schwing, of Switzerland, added a 33-day cycle of mental activity to the first two and developed a computer reportedly showing how you'll respond each day.

Schwing is said to have charted thousands of accident cases supplied to him by the Swiss Police and the Swiss Federal Railways.

His research showed that about 80% of all "human error" type of accidents occurred on "critical" days—at the start and halfway mark of the 23- and 28-day cycles.

It's All Greek to Me

According to Zeno, Greek founder of the philosophy of Stoicism (308 B. C.), every happening in the world is cyclical.

The biggest cycle, he held, was the so-called Great Year—the period of the complete cycle of the world from beginning to end. And scholars have estimated from Zeno's writings that it would take 6,570,000 years to come full circle. (We'll have to wait and see.)

Time for Poltergeists

A reporter we know collects news clippings of unusual events. He's been doing this for ten years, and now he reports that he's found a 12-month cycle in stories on poltergeists.

This seems just about the oddest cycle in this world—or perhaps we should say "out of this world." For poltergeists are naughty ghosts who cause property damage.

Our friend says this cycle reaches a peak each year during a period running roughly from April 10 to June 10. And to prove his point, here are three of the 1960 crop of poltergeist reports.

In Florence, South Carolina, Edward Morris evacuated his family of nine from his small frame house after a six-day barrage of mysterious flying bricks.

In Georgetown, British Guiana, the John Lopes family was plagued with fires in locked drawers, closed rooms, children's books—and, of all places, in a drapery just behind a policeman who visited the house to get the facts!

And down in Birmingham, Alabama, Mr. and Mrs. G. R. Lawrence complained that small etchings appeared on every glass article in their home. These took the form of stars on glassware and stripes on window panes. Gadzooks!

Advice from Nepal

Nepalese soothsayers, who believe in the cycles of planets, recently turned down a $7 million American loan. Why? They don't think the United States will be here for them to pay it back to. Very honest people, these Nepalese. On February 5, 1962, they say, the planets will complete a cycle of immense importance and the North American continent will sink beneath the sea.

Seven planets will be within a few degrees of each other in celestial longitude on that day. The last time it happened was 1914, just before the outbreak of the first World War.

Believe It or Not

Perhaps this column this month should be called "Believe it or Not" instead of "Time and Time Again!"

Additions to the Library:

Employment Cycles

Regional Cycles of Manufacturing Employment in the United States, 1914—1953. By George H. Borts. Occasional Paper 73. National Bureau of Economic Research.

This study is in economics. It treats cycles as non-rhythmic and merely successive ups and downs which is the classical approach to the problem of the business cycle. But a cycle is a cycle, whether rhythmic or not. And the problem of cycles in employment is perhaps the major social and political dilemma we face.

This work, therefore, is an important contribution to the growing refinement of economic analysis. More attention is being given to the fact that regional response to national economic change differs. Also the manner in which prosperity and depression filter through the country from one region to another is an economic subject which deserves more attention.

Mr. Borts reaches several major conclusions as a result of the work that is presented in the report.

That there are "long-lasting differences in the severity" of cycles among states, and that these differences result in part from the types of manufacturing in the states are not surprising conclusions.

Also the statement that these differences have decreased somewhat over the past four decades is not surprising. Apparently togetherness applies to economics also.

States with important industries which experience wide variations during cyclical swings also show wide variation in the other industries in the state. That is, a change in a volatile industry is felt more immediately locally.

The most interesting comment Borts makes is that the combination of fast growth and wide cyclical swings (and the converse—slow growth and mild cycles) is found more frequently than the opposite. This is, of course, a general statement and does not preclude the fact that fast growing states have had mild swings, and slow growing states have had wide swings.

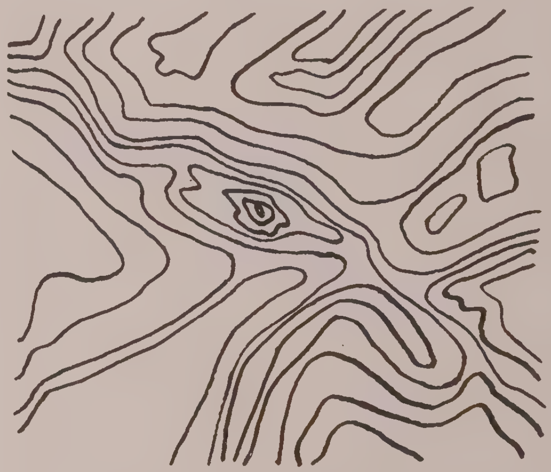
Nor does it preclude the fact that states where growth is retarded, relative to other states, tend to have wider cyclical swings in manufacturing employment.

An economic forecaster must be aware of regional as well as national factors, and the National Bureau of Economic Research has helped the problem immeasureably with this publication.

Ocean Waves

Ocean Waves. An article by Willard Bascom. *Scientific American*, August 1959.

A summary of the history of the research



Ocean waves, when viewed from above, look like a crazy quilt of scrambled ridges in the water.

into the nature of ocean waves, and a review of the current knowledge about waves, which is considerable. Despite the fact that the variety of waves is infinite, and that their combinations make patterns that look like scrambled eggs, statistical methods have been devised to analyze and predict them.

The necessity for amphibious landings in strange waters during World War II gave considerable push to the research into the relations between wind and waves, surf and ocean floor.

The experimental research tanks that have been constructed recently are used to advance the study of pure wave theory as well as for practical application to the problems of ship design, shore installation, and harbor structure. We are checking the methods used in wave analysis for application to cycle study.

Russia and the U. S.

Comparison of the United States and Soviet Economies. Papers Submitted by Panelists appearing Before the Subcommittee on Economic Statistics. Joint Economic Committee, Congress of the United States. United States Government Printing Office, Washington; 1959.

The papers reported here include discussions of the problems of comparing the United States and Soviet economies, the population and the labor force, transportation, agriculture, and industry, as well as comparisons of the levels of living and incentives.

The source material in this publication should be particularly useful in making an exact comparison between the two economies, especially with respect to growth.

The Lemmings

The Hare and the Haruspex: A Cautionary Tale. An article by Edward S. Deevey. The *Yale Review.* December, 1959. Given to the Foundation by Jack Dorland, President of the New York Chapter, and a member of the Board of Directors.

When the lemming population explodes it does so with such dramatic and visible results that lemming migrations are part of even very ancient folklore.

In studying why the lemmings migrate, biologists usually ignore the periodicity of the occurrence, and concentrate on the lemmings glands. This article concerns the nature of the current and recent past research into the biology and pathology and even the psychology of lemmings, and rats, and other small animals.

Deevey points out that there is not one bit of direct evidence that the lemmings migrate because of stress, as some biologists have suggested. (There is some relation to the problems of Navy biologists who studied rats to find out how men might react on long submarine trips, and to the work done by other biologists who want to know why prisoners of war develop give-up-itis, a disease similar to what ails the lemmings.)

But Deevey is willing to bet a few lemmings that their adrenals are periodically congested (for some reason or other). Apparently, the final answer on the lemmings is yet to come.

The Lemming (*Myodes lemmus*).

Illustration by the courtesy of the American Museum of Natural History, New York City

Dr. Abbot's Autobiography

Adventures in the World of Science. By Charles Greeley Abbot, L.L.D., Secretary, Smithsonian Institution, 1928—1944. Public Affairs Press, Washington, D. C. 1958.

The autobiography of Dr. Abbot, whose work we have repeatedly reported to you. If you enjoy reading the personal reminiscences of great men of science, this book will interest you.

LETTERS:

THE GEISINGER INDICATOR

Dear Mr. Dewey:

Will you please explain to me why the data for *The Modified Geisinger Indicator* dated June 29 are *"not yet available"* for *March, April, and May?*

Why can't you keep up with the Federal Reserve statistics or do even better and become a "*leading*" indicator? You should know that many of these questions were asked me by a friend of mine to whom I had shown your July issue.

Winter Park, Florida J. H.

Comment: The answer to your query as to why we "can't keep up with the Federal Reserve statistics" is that of course we do! But you are not alone in asking the question.

Let me explain how the work is processed and then you will understand. Consider the figures on the June 29, 1960 Geisinger Indicator. June 29 was the day that the work was done because that is the *first* day on which certain of the figures we use were released by the government. I called Washington early in the morning because it might have taken as much as two days before the printed release reached us. The people in Washington gave me the figures I needed, the Geisinger Indicator was computed, and the report written.

The report is then mimeographed and mailed before the end of the week to those who want it early.

I cannot tell you how the Geisinger is computed, or what goes into it, but when you see a figure at February, it includes the effect of the latest monthly figures even though it is way back at February.

To give you some idea of what I mean by "includes the effect of" let's look at the First Difference Indicator. This indicator is based solely on the F.R.B. Index. The preliminary F.R.B. Index of Industrial Production for the month of May was released June 15 (of course I already had this figure and it was not one of the ones I got by calling Washington). The preliminary May Index, seasonally adjusted, was 167.

The March Index of 166 (revised June 15 by the F.R.B.), the April Index of 165 and the May preliminary Index of 167 were averaged. The average of 166, 165 and 167 is obviously 166.00. Since this figure represents three months, it is entered at April (the middle of the three months) on the tabulation sheets. Even though entered at April, it includes the effect of the May Index. Then the last two monthly values of this average are in turn averaged. The change from month to month (the arithmetic difference) in this second average is called the First Difference Indicator.

The Geisinger Indicator is much more complicated and includes many factors. But for all of these factors we used the figures that were available June 29. Some of the figures were not available before that. One of the interrelationships put the answer for one of the factors (using the May figure) back at February.

About the "leading" indicator: the Geisinger Indicator leads by eight or nine months. The February figure then is an Indicator for October. It was released the week of June 29, which puts it four months ahead of general business. E. R. D.

* * *

Dear Mr. Dewey:

I sincerely hope you have received so many complaints about the new presentation of the Geisinger chart (specifically, the absence of the vertical month-lines which were a great convenience) that the old chart form will be quickly restored. I will agree that carrying it back six years should be enough; but I do believe the old way of presentation made the chart much easier to use.

Sioux City, Iowa Margaret W. Layton

Comment: We changed the style of the Geisinger chart because of complaints that it was too complicated with all those little lines!

However, I personally am also annoyed by a chart that does not show the full grid. I think, to compromise, that we will show the chart with the month lines about every other issue. See pages 210 and 211 for this month's chart.

Thank you for writing—the only way we have of measuring reaction to what we do in the report is from the letters we receive. G. S.

THE STOCK MARKET

Dear Mr. Dewey:
On 17 1/6-week research on individual stocks; where are the available statistics on the Friday closing price for past years? *Barron's* or the *Wall Street Journal* for current ones, but who has that many back numbers?

Portland, Oregon Robert A. Foster

Comment: Most advisory services want to sell their forecasts and analyses, and are not anxious to part with their basic data. However, you might send letters to various services asking them about it.

People who are interested enough in the market to work at it usually develop their own records. (I know of one man who keeps studies on 300 issues going—he spends many hours weekly on his hobby. However, he says that it has paid him handsomely.) I think you'll find that once you start, the records sort of build themselves.

There really are people who do have long back files of *Barron's*—any good public library also has back files of financial publications. G. S.

* * *

Dear Sir:
Your July article discussing the 17-week cycle states that, on the basis of normal behavior, "we can expect the 17 1/6-week cycle in the Dow-Jones Industrials to crest on time, on the average, for the 36 waves from June 24, 1950 through April 21, 1962." You also state that the "on time" date for cresting of the current wave would be July 30, 1960.

Making a quick calculation from July 30, 1960 forward and using 17 1/7 weeks to make it easy, I find the last crest coming March 22, 1962. This is about a month away from your April 21, 1962, as quoted above, and I am wondering where I went wrong. Using the 1/7 rather than the 1/6-week calculation would not account for this disparity.

Detroit, Michigan C. J. Collins

Comment: I'm sorry the wording was a little obscure. The dates describing the period when the cycle should crest on time refer to the whole cycle, and not just to the crests. Between the two dates the cycle should crest, trough, and go uphill and downhill on time, also.

The crest nearest to the time when the cycle should cease to be on time is the week ending March 24, 1962, as you have figured. G. S.

* * *

Dear Mr. Dewey:
Have you considered the possibility that the 17-week cycle is actually a fraction of the calendar year?

Brookhaven, Miss. Van R. Hatcher

Comment: The 17-week cycle cannot possibly be a fraction of the year. We have measured it within a fraction of a day. It cannot be more than 1/6 of a day longer or shorter than 120 1/6 days. E. R. D.

SHOE PRODUCTION

Dear Mr. Dewey:
It is hard for me to believe that 53,403,000 pairs of shoes were produced in February 1960. This would mean a pair for approximately one out of three people in the entire country. If it is not too much trouble to you, could you drop me a note and tell me how many pairs of shoes were produced for the full year 1959?

New York, New York H. H. Ruch

Comment: The figure of 53,403,000 pairs of shoes is correct. Apparently all of God's chilens got more pairs of shoes than they need. In the full year of 1959, we produced 632,108,000 pairs. Isn't it wonderful that human beings were descended from monkeys instead of centipedes!

Incidentally, we have some Russian figures on shoes. In 1955 the U.S.S.R. produced 274 million pairs, or about 1.4 pairs per comrade. We produced about 3.5 pairs per person. E.R.D.

TECHNICAL

The Strieff Method of Cycle Analysis

Since we published the article "A Strieff Analysis of Stock Prices" in the June 1960 issue of *Cycles,* several members have asked how to make a Strieff analysis.

The method was developed by Abraham Strieff of New York City who has spent a lifetime building dams. The variation in the run-off of water is a problem that dam-builders have to consider; Strieff became interested in how to forecast this variation. It just doesn't do to build a multi-million dollar dam and then have the river dry up.

He found that the variation in run-off is cyclical, and developed this method for using cycles to analyse the water levels in rivers. The Strieff method is one way of dealing with irregular cycles. Perhaps it would be more correct to say that the Strieff method shows only irregular waves. No effort is made to put the waves into rigid cycle patterns.

The technique breaks the data down into three component cycles. The sum of these three parts always equals the original data. The cycles will vary in length and amplitude.

You can use any period you want; days, weeks, months, years. The selection will depend on the area in which you want to work.

Because of space limitations, the entire process of computation has to be collapsed into a short article. The following tabulation gives the column headings of the work sheets you would use to make the analysis.

If you follow the columns through from the beginning to the end, draw the charts, and complete all the computations you will have a Strieff analysis. The notes at the end of the table give some explanation.

This set-up is really all you need to know. It gives the actual manner in which the problem is worked. The mathematics upon which Strieff built the method are reviewed in various articles, including "The Practical Importance of Climatic Cycles in Engineering" in the *Monthly Weather Review* of October 1929, and "On the Investigation of Cycles and the Relation of the Bruckner and Solar Cycle" in the Monthly Weather Review of July 1926.

G. S.

The Set-up for Working Out a Strieff Analysis–

Column Number:	1	2	3	4	5	6	7
Dates	The Data	Logs of the Data	2-Item Total of Col 2	2-Item Total of Col 3	2-Item Total of Col 4	2-Item Total of Col 5	Short Moving Average Col 6 ÷ 16
		Chart 1 Line 1	/----------Center these columns as you compute----------/ them; write the answers in Col 3 between the lines, the answers in Col 4 on the lines, etc.				Chart 1 Line 2

Col: 8	9	10	11	12	13
Col 2 + 2.000 Less Col 7	2-Item Weighted Moving Total of Col 7 Weights: 1,0,1	2-Item Weighted Moving Total of Col 9 Weights: 1,0,1	2-Item Weighted Moving Total of Col 10 Weights: 1,0,1	2-Item Weighted Moving Total of Col 11 Weights: 1,0,1	Long Moving Average Col 12 ÷ 16
First Approximation of the Short Cycle	/--------------------Center these columns as you compute them; put the answer in the second of the three items------------/				
Chart 2 Line 1					Chart 3 Line 2

Col: 14	15	16	17	18	19
Col 7 + 2.000 Less Col 13	Median of Waves in Col 8 Determined Graphically	Col 8 + 2.000 Less Col 15	Col 14 + Col 15 Less 2.000	Median of Waves in Col 17 Determined Graphically	Col 17 + 2.000 Less Col 18
First Approximation of the Middle Cycle	Worked out on the face of the chart; see note below	The Short Cycle	Second Approximation of the Middle Cycle	Worked out on the face of the chart; see note below	The Middle Cycle
Chart 2 Line 2		Chart 5 Line 1	Chart 3 Line 1		Chart 5 Line 2

Col: 20	21	22	23
Col 13 + Col 18 Less 2.000	Median of Waves in Col 20 Determined Graphically	Col 20 + 2.000 Less Col 21	Col 16 + Col 19 + Col 21 + Col 22 Less 6.000
Long Cycle and Trend	The Trend	The Long Cycle	The Data, as in Col 2
Chart 4 Line 1	Chart 4 Line 2	Chart 5 Line 3	

Notes on the Table–

The Medians: When the charts are drawn, Column 14 should be plotted directly below Column 8. A second line is then drawn on top of the line of Column 8 so that it bisects the legs of the waves shown by Column 8, and also so that it resembles the contour of the drawing of Column 14 which is directly below.

This second line is the median line of Column 8, and its values are read off the chart and entered into Column 15.

The same process is used to obtain the values for Columns 18 and 21, although of course the medians are drawn on the particular lines mentioned.

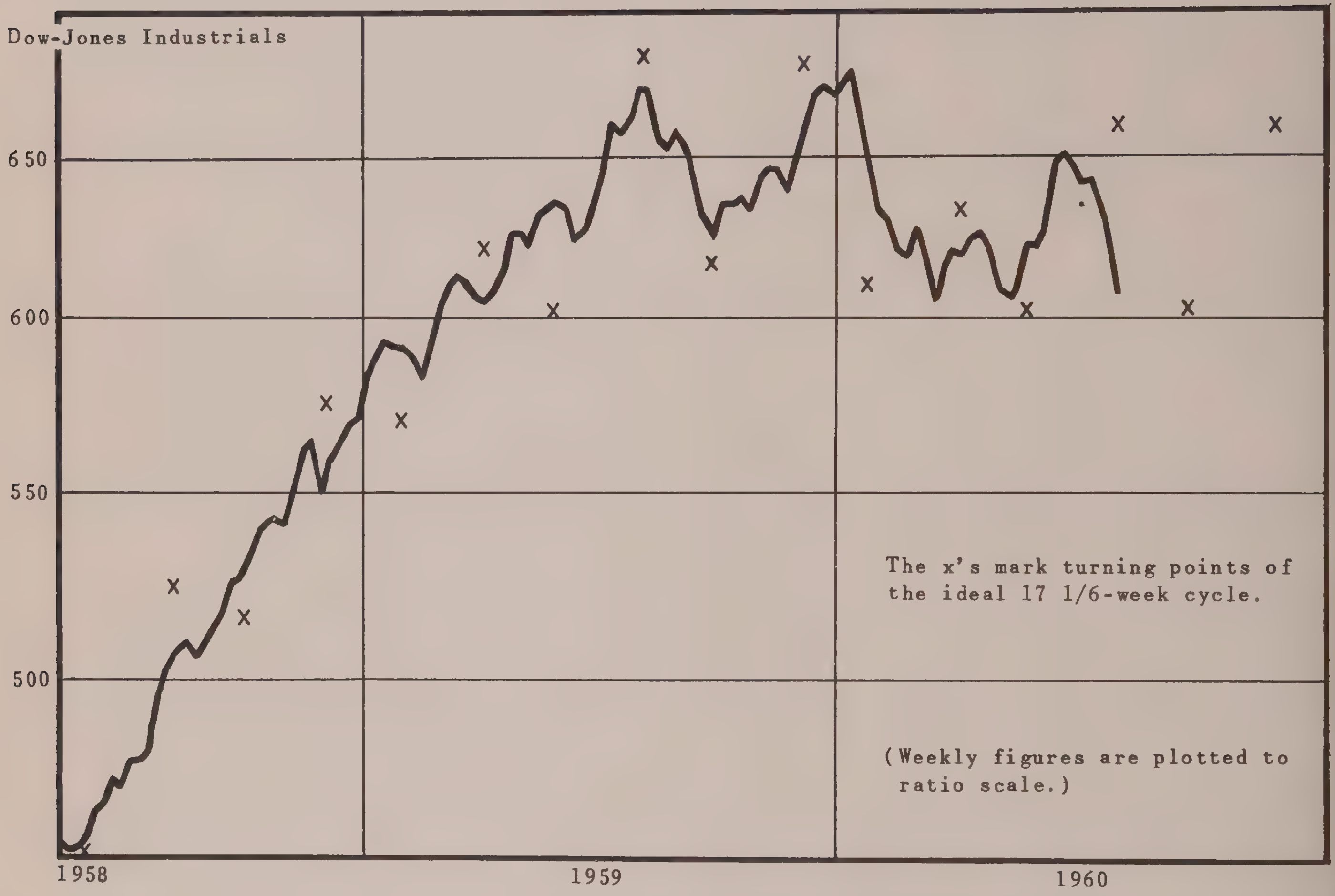
The Weighted Moving Totals: Going down the columns, the first and third item are added together, and the result entered into the second place in the next column. That is, the second item is given the weight of zero, or is just omitted.

Then the second and fourth items are added, and entered into the third place, etc.

The Cycle Round-Up

A report on how well the current figures match the cycles

Stock Prices:



The x's mark turning points of the ideal 17 1/6-week cycle.

(Weekly figures are plotted to ratio scale.)

FIG.1: THE DOW-JONES INDUSTRIALS WEEKLY AVERAGE

Last month's report on the 17 1/6-week cycle stated that although since the middle of 1959 the cycle has worked reasonably well, ". . .it appears that the actual wave may be a little early for the second peak in 1960. . ."

It appears now that this statement about an early high was right. On the chart above the timing of the average cycle is marked by the small x's. The solid line shows the weekly average of the daily close of the Dow-Jones Industrials. The last plot is for the week ending Friday, July 29.

Figure 2 on the next page shows the cycle as it was isolated from the data in Figure 1. The solid line on Figure 2 includes the data through July 29. But, because of centering, the computed figures are back nine weeks. Therefore we extended the line by pure guesswork

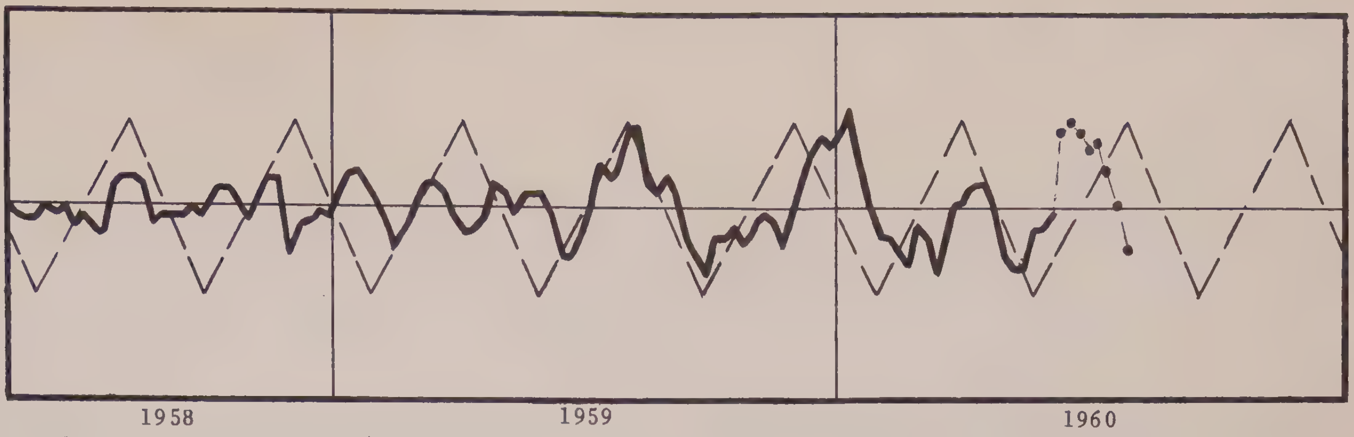


FIG. 2: THE 17 1/6-WEEK CYCLE IN THE DOW-JONES INDUSTRIAL AVERAGE

The extension is shown by the heavy dots.

The peak week was actually the week of June 17, whereas the ideal time of high was the week of July 30. The time of the next ideal low is the week of September 18. The following ideal high is during the week ending November 27.

Thus, the next critical date, *with respect to this cycle only*, is the week of September 18. Remember that this is only one of the many factors which influence the market.

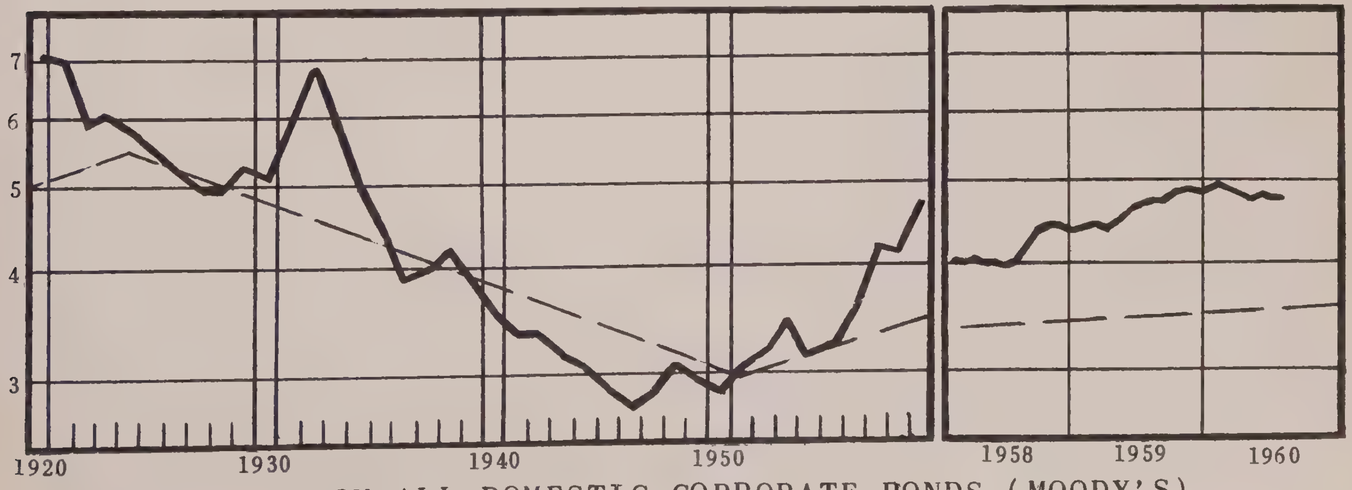
G. S.

Bond Yields:

The well-known 54-year (or Kondratieff) cycle has dominated interest rates for as far back as we have records, which is to 1790. The ideal cycle based on the average timing has a low in 1951, and will continue gradually upward until 1978 or so.

Actual interest rates will not, of course, move in a constant and steady upward direction. The line of actual interest rates will get ahead of, and then lag below the ideal cycle line. But the general long term direction of the actual line should be more upward than downward over the next 18 years.

On the chart the solid black line is the record of yields for all Domestic Corporate Bonds as computed by *Moody's*. The June figure was 4.78%, and the preliminary July value is 4.75%. The very sharp rise over the past ten years is due to short cycles and random factors. The more slowly rising 54-year cycle puts a firm base under interest rates, however. The dips in the line should fall to successively higher levels while this cycle is rising.



YIELDS ON ALL DOMESTIC CORPORATE BONDS (MOODY'S)

Cotton Consumption:

Cotton consumption is (more often than not) dominated by a 23.75-month cycle. This cycle had a low at February 1960 and is now on the way up to a high due at February 1961.

In addition, cotton consumption has a strong and reliable seasonal pattern. It has a low at December, and an extreme low at July. The months in-between are higher.

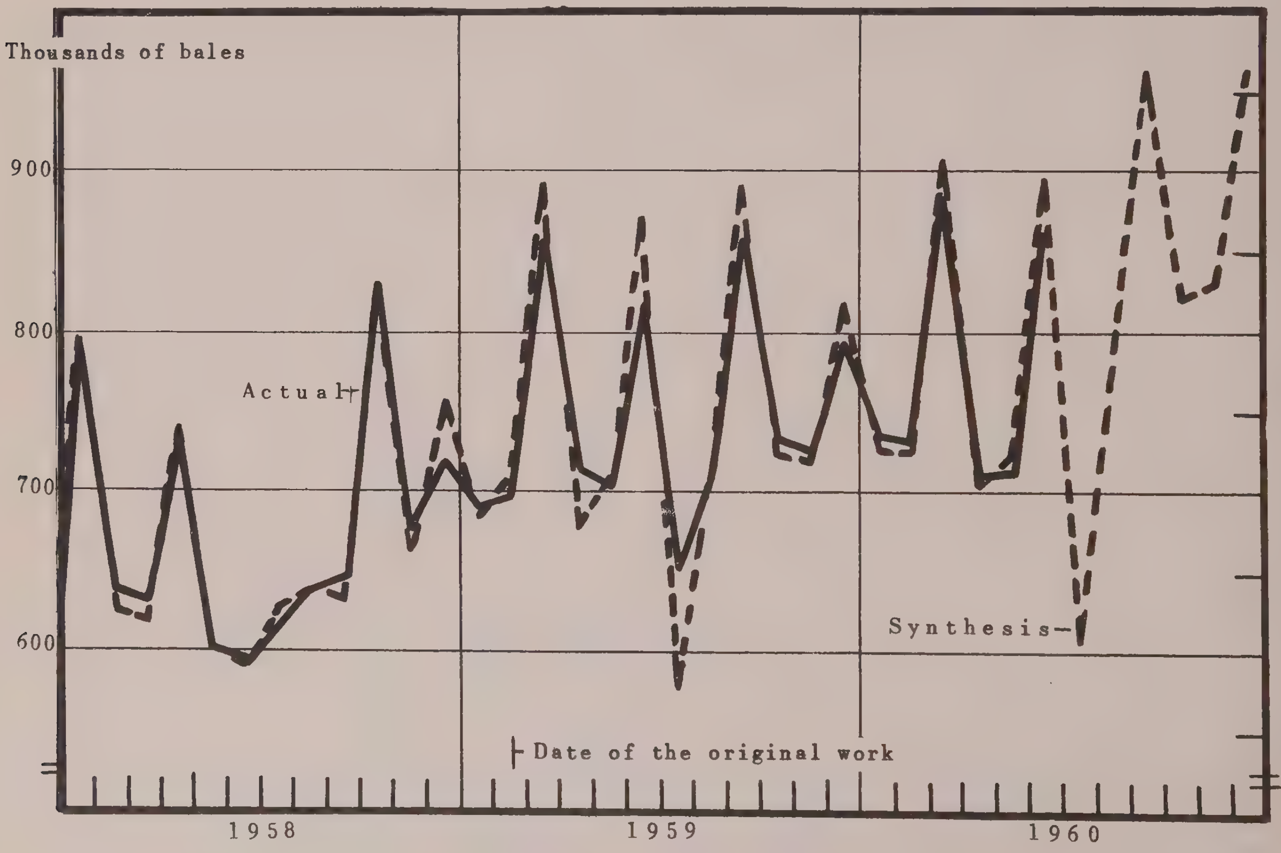
These two cycles are combined with an assumed underlying trend to obtain the synthesis line shown in the chart. The actual consumption of cotton is shown by the solid line. I should mention that the figures are bales of cotton consumed. A bale of cotton is considered consumed when it is opened at the mill.

The monthly figures jump up and down on the chart because some of the months are 5-week months, and the balance are 4-week months. In June (a 5-week month) 858,000 bales were used.

Yearly totals of actual cotton consumption are compared in the following table to the totals obtained from the synthesis of the 23.75-month cycle, the 12-month cycle and the trend which we are now using. G. S.

Cotton Consumption (000 Bales)

Year	Actual	% Change	Synthesis	Change
1958	8,126		8,124	
1959	8,977	+10.5	9,018	+11.0
1960	?	?	9,645	+7.0



COTTON CONSUMPTION—ACTUAL AND SYNTHESIS

THE GEISINGER INDICATOR

The current month's forecast: Caution!

The seasonally adjusted Index of Industrial Production from the Federal Reserve Board went down one point from 167 in May to 166 in June. This one point decline is a very minor change.

Remember that the Production Index and all our Indicators apply to the whole country. Local situations may be greatly different.

The Geisinger Indicator (computed with the June figures, but entered at March because of the method of computing), again hit a -2.00 warning signal. The value for March was -2.20. Advanced eight months this Indicator applies to November.

This signal is the third warning signal in seven months. Although one of these was from the steel strike, the repetition of the warning gives added weight to its meaning.

On the other hand, the First Difference Indicator, which measures rate of change, paused in its downward move at 0.16 for May. For the last three months this Indicator has hovered around the zero line. In other words, there has been little *relative* change in the level of production for some months.

The Modified Geisinger Indicator is down to -2.53. This Indicator combines the Geisinger Indicator and the First Difference Indicator. The combination matches the contour of the smooth line of the F.R.B. Index somewhat better than does the Geisinger Indicator alone.

The last time there were repeated warnings on the Geisinger Indicator was in 1956 and 1957. These warnings were followed by the dip in production in 1956, the leveling of production in 1957, and finally by the drop in late 1957 and in 1958.

The Geisinger Indicator does not tell us the *extent* or *duration* of the coming decline. However, the current warnings should not be ignored. Caution should be used in business transactions until the Geisinger again cuts +2.00 going up.

July 27, 1960 E. R. Dewey

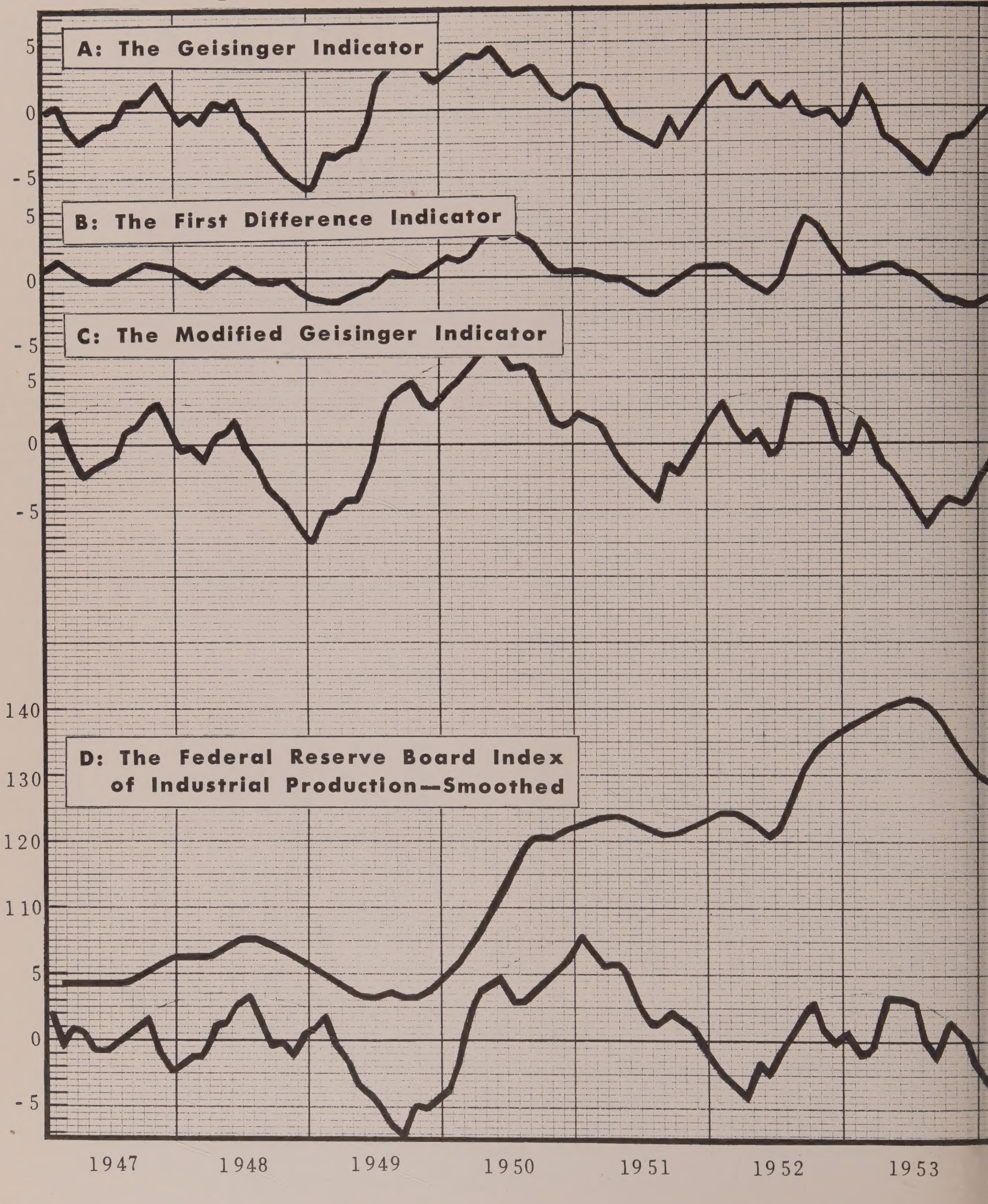
The facts:

Month	F.R.B. Index	Geisinger Indicator	First Difference Indicator	Modified Geisinger Indicator	Advanced 8 Months
Oct-1959	154	-3.20	-1.83	-5.03	1960-Jun
Nov	155	-1.00	1.00	0.00	Jul
Dec	165	-0.80	3.67	2.87	Aug
Jan-1960	168	-2.80	4.16	1.36	Sep
Feb	166	-1.60	2.00	0.40	Oct
Mar	166	-2.20	-0.33	-2.53	Nov
Apr	165	*	-0.33	*	Dec
May	167	*	0.16p	*	1961-Jan
Jun	166p	*	*	*	Feb

p - preliminary; * - not yet available

The chart: See the next two pages

The Geisinger Indicator Compared To Industri



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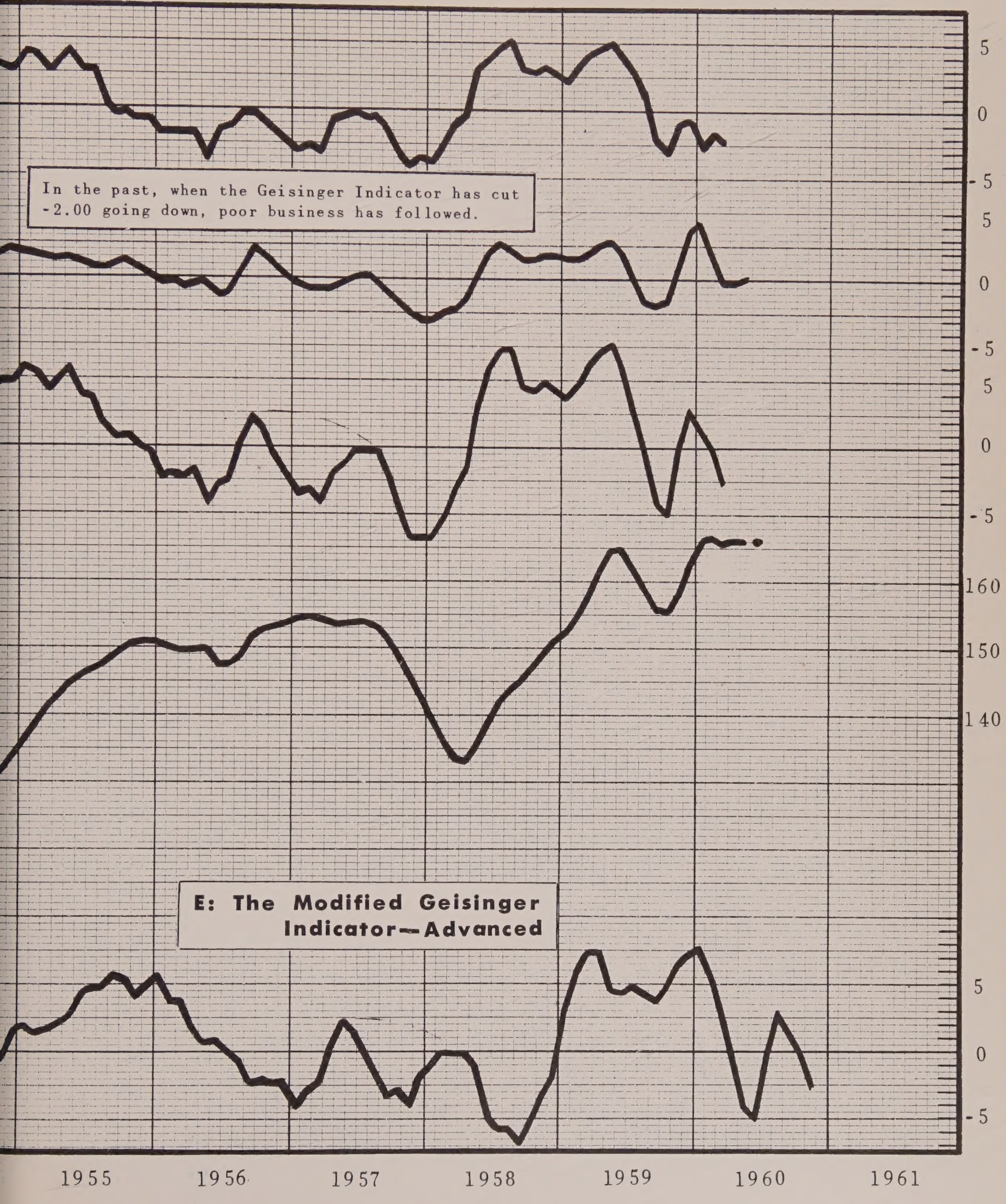

In the past, when the Geisinger Indicator has cut -2.00 going down, poor business has followed.

E: The Modified Geisinger Indicator—Advanced

H A MUSHAM
741 N RUSH ST
CHICAGO, ILL

JOURNAL OF CYCLE RESEARCH

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